“And they did beat the gold into thin plates, and cut it into wires, to work it in the blue, and the purple, and in the scarlet, and in the fine linen, with cunning work.”
Ex. 39:3.

One of the first lessons to learn is how to embroider with both hands, the right hand under the frame, and the left hand on top; the right hand pushing the needle up and the left hand pushing it down. Observe this in Figure 1.

Gold Thread Couching is a simple stitch, for which is used gold thread (metal thread) one thread or two threads sewn at a time (or purse twist or filoselle). Gold thread is not pulled down through the linen except to fasten it at the ends in the beginning and in the finishing. Usually sewing silk of a contrasting shade is used to sew the gold; orange is preferred, or a rust red; though we use also gold colours.

The simplest of Couching stitches is bricking, as will be seen in Figs. 4; and 7, the gold framework that surrounds the rose design. Stitches are often so arranged as to form diamonds on the gold, or zigzag lines. The threads of gold are laid one or two at a time, and a No. 9 needle is used for the sewing silk. A large crewel needle will be needed to thread the gold. A quarter inch is all that is necessary to pull through the linen in the beginning. In couching gold around a finished embroidery, the gold should be laid very close to the edge, and the needle threaded with the sewing silk be brought up on the outside of the gold and put down through the edge of the stitches of the embroidery.

All remarks applying to the couching of gold thread may be applied to the couching of silk twist or cords. (See Figs. 5, 7 and 8.)

Italian stitch in which stout floss is used for a foundation is the most beautiful of stitches. The floss is stretched across the surface from end to end of the design, care being taken not to twist a fibre, so that when the surface is covered it will be as shining and smooth as satin. The finest gold thread is then laid across the silk in lines one-eighth of an inch apart and couched evenly. The beauty of this stitch depends on the glossy smoothness of the
floss, the straightness of the lines of gold, and the evenness of the bricking or couching stitches. (See Figs. 5 and 15.)

Ladder stitch is a variety of Italian stitch used in embroidering veins in elaborate leaves. An example is shown in Fig. 11. The leaf is embroidered in shades of sea green, the vein is black floss laid in long flat stitches the entire length of the vein. Finest gold thread is then couched across the vein in a zigzag line catching the gold down only at the turns, on the extreme edge of the vein. The vein is then outlined with a thread of heavy gold. The veins need not be black. Sometimes we make them blue, sometimes they are gold colour.
Figure 6
FLEMISH MITRE OF THE 16TH CENTURY, WITH MANY EXAMPLES OF GOLD THREAD COUCHING STITCHES

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Fig. 7 is an example of gold thread couching and of the Tudor Rose in long and short stitch. The leaves are done in Italian stitch, a most unusual treatment. The rose is embroidered in three shades of pale pink floss, using the deepest shade to couch around the edge of each petal. The centre is a pale gold crossed twice with a deeper shade. The leaves are in two shades of green, a light shade on one side of the leaf, and a darker shade on the other side of the leaf, and crossed with the same shades.

The stems are couched green silk. The embroidery is done on a pale old blue Caterbury damask. Gold thread couching is seen as framing the design, and is the only gold used.

Fig. 6 is a photograph of a mitre in the Victoria and Albert Museum in Kensington, London. It is Flemish of the 16th century. The inscription inside states that it was made in 1592. It is embroidered in silver-gilt thread. The figures are St. Leonard and St. Mary Magdalene. The faces are embroidered in vertical long and short stitch. All the rest of the embroidery is in silver-gilt thread.

There are many examples in it of the various flat couching stitches, and of raised gold over cords. The robes of the figures are made of laid gold thread couched with silk in one colour but of various shades; the stitches being close together where it is desired to show folds, and further apart where there are high lights. In some cases the stitches are so close together as to completely hide the gold.

The background of the figures shows various diaper stitches.

Damascene stitch is a variation of Italian stitch, in which the gold thread is laid down in scrolls as shown in Fig. 9. This particular stitch is my invention. I use it for very special work. The floss is stretched from top to bottom of the design and is held down by the gold thread which is put on in scrolls, using a very fine gold. All ends of the gold must be drawn through the fabric and fastened securely. The eye is the only guide available in forming the scrolls.

The damask on which this cross is done is "Lion" damask, one of our richest damasks.

Long and short stitch is used in working shaded figures or flowers, or leaves, etc. In the case of a
Figure 8
A CONVENTIONAL POMEGRANATE (EX. 29:23)
The fruit reserved for kings in Old Testament days. This shows an example of long and short stitch in the green leaves at the sides; of flat couching of gold silk twist at the bottom and at the top, and of couching of gold silk twist over cords (basket stitch) in the centre. The pomegranate is shown split open and the crimson seeds appearing within. The crown shape at the top, always present in the pomegranate, shows coral shade on the inside.
and flowers that are to be shaded in their natural colours should be done in long and short stitch. This stitch allows the shades to melt into one another; so that an indefinite number of shades can be used in one subject. For examples of long and short stitch see Figs. 8, 10, 11, 14.

Basket Stitch is used for working letters or straight line figures. As an aid for this stitch there are stiff, tightly woven cords, called lace cords, that come in several sizes. The cords are laid down on the design in rows of equal distance, being cut exactly to fit the space, and are sewed in place with fine cotton. Figs. 16, 17. If purse twist is to be used for this stitch take two needlefuls, and bring both needles up at the top and centre of the design. Guiding the two threads of twist down over the cords with the left hand, couch the twist down between every two rows of cord. The couching stitch must be exactly the width of the two threads of twist. When the threads are couched down to the end of the design the twist needles are put down through the fabric and brought up a little further along the edge at the bottom of the design and the work is continued to the top, bricking the stitches. Gold thread or floss or filoselle may be used instead of twist. In Fig. 8 there are two examples of basket stitch, one plain

flower or leaf it is usual to begin at the centre of the top edge, working to the right and then to the left. The stitches should be uneven in length, averaging one-quarter inch, and lie close together. The needle is brought up through the stitches of the row above and should cover at least half their length. In choosing the stitch to be used we should select the one that will make the best copy of the subject in its natural state; for that reason leaves—not padded—seen at the top and the bottom of the figure, and the other raised with cords in the centre of the design. The unevenness of the brick couching should be noted, being couched closer to one cord than to the other, alternately. In Fig. 10 we have an example of plain flat couching of gold thread, and also couching of gold over small cords. Fig. 10 shows also long and short stitch, as does Fig. 11. In Fig. 10, in the leaf, the colour scheme is pale.
Figure 10
GOLD THREAD COUCHING AND LONG AND SHORT STITCH AND BASKET STITCH

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shades of sea green with heavy veins of old blue, long and short stitch. There is a wide vein of gold thread couching on the edge, with three centres of white floss in Italian stitch crossed with white, and edged with gold thread. The three heavy thorns on the edge of the gold vein are in long and short in three shades of deep coral.

*Modern embroidery or satin stitch* may be done with a fine purse twist, or filo floss, after the design has been padded with filoselle or embroidery cotton. A large needle is advised, keeping the silk evenly twisted, and making the stitches at right angles to the design. Should the silk get dull in working, a new thread must immediately be taken. This stitch is commonly used in embroidering Altar linen. (See Fig. 44.)

We urge against padding embroidery on Altar linens that are to lie flat on the Altar, for the reason that heavy embroidery impedes the easy movement of the sacred vessels during the celebration of Holy Communion. Embroidery on the linens that lie flat on the Altar (the Fair linen and the Corporal) should be quite flat; linens that hang may be padded.

*French Knots* are made with twist more or less heavy. Their beauty depends on their regularity. So we will imagine that each knot is to occupy a tiny square, and then we will bring the needle up at the lower left hand corner of that square, make the knot, and put the needle down in the upper right hand corner of the square. The imaginary square must be no bigger than the knot. To make the knot draw the thread tight and hold it in the left hand; wind the silk around the needle once and slide the loop that is formed down to the linen. Draw the needle down through the linen, still holding the silk firm with the left hand, gradually letting it slip until the tight knot is formed. (See Fig. 12.)

*Wool stitch* is used to imitate the fleece of the lamb in working the Agnus Dei; and as nearly as it can be described it is a long French knot, in which the knot is at one end of a long stitch. After wrapping the filoselle around the needle, the needle
is put down through the fabric at least one-quarter inch from the place where it came up. When taken properly this stitch appears like early wool. Some shorter stitches are taken than a quarter-inch, especially around the head, neck and knees of the Lamb. (See Fig. 5.) The Agnus Dei gives also an example of Italian stitch, long and short stitch and gold thread couching. The Lamb should always appear on a sky ground. The sky is done in many shades of blue and opal, imitating an early morning sky. These stitches are stretched from left to right until the whole ground is covered; and then the finest gold thread is laid across the floss up and down at right angles to the floss stitches. The Lamb stands upon a grassy plot in shaded greens and browns, and after the gold thread is laid down the little flowers are put in. The wool stitch is clearly shown. The shades of floselle used are creams, grays and light tans. The face and ears are done in long and short stitch. The flag is white with a crimson cross. The cross in the nimbus around the head is also crimson. This embroidery is on a white bursel made for Washington Cathedral by the Cathedral Embroidery Guild, and has been in constant use for thirty years. Many threads are sadly worn.

Face embroidery (See photo of the Good Shepherd, Fig. 18) is done with tram-silks, of which there are many flesh tints. The stitch that produces the best results is long and short, made so close and fine that the separate stitches are not discernible, but present a satin appearance. A No. 12 needle will be used and the silk separated into strands of two or three threads each. The frame should be mounted with linen sheeting and over that should be stretched and sewed a piece of fine nainsook or Bishop’s lawn. On this is drawn the face that is to be worked. Before taking any stitches there should be drawn lightly a number of parallel guide lines straight down the face from the forehead to the chin. This is for the direction of the stitches which will be parallel to the lines. The shading is the most important point, and six or eight shades of tram silk will be needed. For the eyes use a gray blue split filo. The pupils should be black and be worked in a stem stitch beginning in the centre and working in a circular direction. The iris should be worked in the same way, using the blue split filo, and taking very tiny stitches. The hair should be worked in long and short stitch and stem stitch, following the direction of the waving lines of curls, and shading carefully. The rest of the face, even the ear, should be worked in the straight lines, depending on the shading alone to delineate the features, with the exception of the eyebrows and lips. In the upper lip the stitches slant from left to right, and in the lower lip the perpendicular direction of the stitches is resumed. After the face is completed a few stitches of a darker shade may be used to delineate the eyebrows and lashes. Always the cross in the nimbus should be a rich crimson.

The hands and feet are embroidered in the same way as the face.

Split stitch is done with floss silk or with split filo. Usually only tram silk is used for the face and hands. In making split stitch, the first stitch taken is about 1⁄8 inch long, and the needle is brought up through this stitch and about half way down the length of it. (See Fig. 22, The Virgin.)

Figure Embroidery

The robe of the Good Shepherd (Fig. 21) is worked in pomegranate or rust red shades of floss in Italian stitch, crossed with a medium red sewing silk couched down in burred stitches. The lining of the robe is shaded fawn colours and covered in
scrolls of finest gold thread in Italian stitch. For the alb beneath the red robe white floss is used shaded with pale greens and crossed in horizontal lines with finest gold. This figure is still in the making. The red robe is to have a handsome border of gold thread.

For the Lamb the wool stitch is to be used, and coloured as described in Fig. 5. The legs below the
Figure 19

CHERUB FACES AND CLOUDS DONE IN SCANTY SPLIT STITCH

Figure 20

ANGEL ROBE DONE IN SOLID SPLIT STITCH

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knees and the face and ears are to be in long and short stitch. The Head of the Good Shepherd as shown in plate No. 18 belongs to this figure.

In Fig. 22, the Blessed Virgin, is an example of split stitch worked on a satin foundation. All the embroidery is split stitch, even the face and hands. The stitch can be seen plainly in the white vesture underneath the blue robe. The outer robe is shades of Virgin blue satin and lined with rose colour, and edged with a border of fine gold thread. The veil over the head is bluish white shaded with blue. The hands are outlined with maroon silk.

The gold diaper stitch in the upper right hand corner of figure 20, is done without padding. The diamonds are formed with bricking stitches rather close together; and in the intervening spaces of the laid gold there are no stitches.

The diapering in Fig. 6, in the background of St. Leonard and St. Mary Magdalen is a flat lattice work, the design being formed by the bricking stitches taken to sew down the gold. It will be a help to draw the design on the linen first, and then to couche the gold down with a contrasting silk, red or green or blue, in close bricking stitches. The dark lines outlining the lattice are taken with a couched twist, very closely and carefully couched, to keep the lines even and distinct. A double ladder stitch is repeated in the framework of the two figures.
Figure 21

THIS FIGURE OF THE GOOD SHEPHERD IS 42 INCHES HIGH

It is only partly finished. The head is shown in Fig. 18. The face and hands and the foot are to be done on the small frame, and cut out, and transferred to the large frame. The small frame is shown in Fig. 2.
Figure 22

THE FIGURE OF THE BLESSED VIRGIN
Showing an example of split stitch over applique satin
Figure 23

GOLD THREAD COUCHING, ONE THREAD AT A TIME
A sampler, Fig. 20 (Wantage, England), shows method of working solid split stitch in angel robe, the stitches following the direction of the folds. Two shades of pale pink were here used.

In the upper corner are two examples of Opus Anglicanum, or English gold work giving a method of covering backgrounds or large spaces. The gold is shown shining through the stitches. The gold thread is laid down first and then the stitches are worked over it.

Please note how the heavy linen was first mounted in the frame, and then a piece of finest linen, Bishop’s Lawn, was pasted over the heavy linen; and when dry, the design for the angel was drawn on it. Where the stitches are so very fine, it is necessary to have a fine linen to work on. The same process is observed in doing face embroidery.

Three examples are given here, Figs. 23, 24 and 25, showing how to embroider a cross in gold thread 
sewing down one thread at a time. We begin on the outside line, and follow the outside line all around the cross to where we began. The next line of gold is sewed inside the first line and close to it, bricking the stitches. The third line is sewed inside the second line—one thread of gold sewed inside the second line of gold, and close to the second line—as close as we can get it; and so on, until the entire surface of the cross design is filled up with gold. You may fear it is not going to look right when it is finished, but it does look right, and the reflection of light on the weaving lines of gold is beautiful. In figure No. 24 the cross is not entirely filled in with gold; instead, the small unfilled spaces are filled in with blue seeding stitches, and are just as pretty as can be against the rust red damask.

We have another method of gold couching over pads. These pads may be made of felt cut out in \( \frac{1}{4} \) in. squares or circles, or larger, and sewed down on the foundation linen or silk. These pads may be set in any desired design in rows or squares or diamonds. The gold is then couched down two threads at a time in rather close stitches, but no stitches are taken over the pads. The effect is a pleasing relief to flat couching.

In the “Cherubs,” Fig. 19, the entire subject is sketched on palest pink satin, which has been previously pasted down on the linen in the frame. The features and hair are embroidered, and the face shaded with scanty split stitches. The aura about the head is gold thread. The wing feathers and the face are outlined with maroon, and the feathers filled in with scanty pink and blue split stitch. The clouds are shaded with three lavender shades also in split stitch and outlined with one thread of silver and one thread of purple. All the split stitching is vertical.

![Gold Thread Couching, One Thread at a Time](image-url)
Figure 5.
GOLD THREAD COUCHING, ONE THREAD AT A TIME
ALTAR HANGINGS

Three altar hangings are shown in Figs. 26, 27, 28. Nos. 26 and 27 are superfrontals, meaning over or above the frontal. The frontal falls to the floor. The superfrontal falls six inches to twelve inches. Nine inches is good, general depth. The frontal is not necessary; but is an added decoration for festival occasions.

Fig. 26 is a purple superfrontal made for St. Mark’s Church, Washington, D. C. The silk damask used is one of the standard English damasks called the Tudor Rose or Small Rose damask, a 27-in. damask that can be used both ways. It has no special up and down pattern. The passion flowers are done in long and short stitch in natural shades, using a purplish old rose, and leaves in five shades of green, with gold thread veins and scrolls and tendrils. The petals of the flower are palest on the outside edge shading to dark rose, and palest greens in the centre of the flower. The fringe in the flower is dark purple. The stamens are bright orange with green stems; and in the centre a lustrous pearl.

The IHC is done in medium gold thread over white felt. The felt is first stamped with the IHC. The design is then stamped on the damask. The letters are cut out of the felt and sewed down on the damask. The gold thread is sewed with rust red sewing silk in rather wide-apart stitches, in order to make prominent the basket effect of the couching, as the stitches sink into the felt. I suggest stitches 1/4 inch apart. It is wise to begin in the centre of the felt, laying a row of gold — two threads — straight down the centre of the letter, in order to hold the felt firm and in place. The fringe is composed of purple spaces to match the damask, and in between spaces of lavender and greens.

Fig. 27 is a green superfrontal on “Bird” damask, embroidered with pomegranates and leaves and crosses. This was designed and embroidered in the
Cathedral Studio. The design may also be used on white or red. The pomegranates are gold thread with coral seeds. They are framed in green leaves with blue "turnovers." The leaves have dark blue veins crossed with diagonal ladder stitch of finest gold thread. The crosses are solid gold with blue centres. The leaves between the crosses and the pomegranates are shaded greens with black veins caught down with gold in ladder stitch. The scroll supporting the design is gold purse twist couched two threads at one time with gold sewing silk of the same shade, and edged with gold thread. The fringe is two tie fringe in olive and gold and coral and blue.

Fig. 28 is a white silk damask frontal and superfrontal made for the College of Preachers, Washington Cathedral. The panels or orphreys on the frontal are crimson and gold cloth of gold "St. Hubert," edged with crimson and gold gallon. The IHS is done with gold thread over felt, using the same treatment as in the purple hanging above. The scrolls ornamenting the letters end in green leaves. The rays of glory surrounding the sacred monogram are in alternate gold thread and crimson silk.

In the super-frontal the Sanctus, Sanctus, Sanctus (Holy, Holy, Holy) is embroidered in gold with scrolls in crimson and gold. The fringe is cream, and pale green, and magenta crimson, in a 1 1/4-inch depth. A narrower fringe in the same shades extends up the sides of the hanging.

A frontal may be without embroidery if necessary. The orphreys, a word which comes to us from "aurifrigium" (meaning ornamental, splendour, gold ornament), are an ancient mode of ornamenting vestments. These orphreys may be considered sufficient decoration without embroidery, and their number may be increased to five or seven.

The next figure, No. 29, shows a frontal and superfrontal made of tapestry, the colourings of which are copied from old Portuguese embroidery. The grapes are blue purples, the leaves are various greens, the tulips are shaded old blues. Some of the flowers are crimson, and some are shaded browns. The birds are gold colour. There is a glint of sheen of gold, shining through the ivory ground. The orphreys are crimson velvet stamped with crosses or embossed with crosses, and edged with gilt gallon. The glorious fringe is blue, and crimson and gold, separated by spaces of black, 1/2 inch wide.

The embroidery of a superfrontal requires a frame as long as the embroidery, or longer, six to twelve feet long, and as wide as the depth of the superfrontal, nine to twelve inches. The frame is mounted in stout linen, and the silk damask pinned in place and sewed down along the edges with catstitches, drawing the damask as tight as possible. When this is finished it will be as tight as a drumhead. The design may then be stamped on the damask, and the embroidery will be done directly on the silk. The embroidery is starched on the back.
and allowed to dry thoroughly. It is a wise procedure to sew the fringe down on the silk before taking it out of the frame. In sewing the fringe it should be held in a little. We like to allow a quarter yard for this purpose. The fringe heading is a selvedge and shrinks in the dampness; and to prevent this shrinking and drawing up of the silk hanging we ease the fringe as we sew it down. We always begin in the centre and sew to the ends.

After the embroidery is cut out of the frame,
the linen back on which the hanging is to be made is cut and hemmed and a casing or wide hem made in the back through which to run a rod to hold the hanging on the Altar. We make this linen backing first. It covers the top of the Altar and falls the depth of the finished hanging. Then we sew the silk on to that linen backing, allowing an inch of silk to lie on top the Altar. There is no other lining. The linen top is covered with the Fair linen. It is not usual to have ends to the silk hanging. They would be covered by the Fair linen anyway, so why have them?

The letters in the word HOLY (Fig. 30) are 15th century letters. The H is in a flame colour red, and the other three are done in old blue. The body of the H is in Italian stitch, using straight lines of finest gold in groups of two; and the medallions are in gold thread.

In the O, L, and Y the Italian stitch is in rather whimsical designs. The medallions are done in gold thread in widely crossed lines showing the blue beneath. The letters are outlined in white twist, and then one thread of gold, and black outside of all, making an effective treatment. These we embroidered on linen, and shall cut them out and sew them down on the silk, outlining with another thread of black. We call these “illuminated” letters.

Edging with gold metal thread is not always the most artistic finish. White purse twist is lovely especially on blue flowers. A black twist is handsome added to the white edge. This kind of finish preserves the Virgin purity of the blue, which is sometimes quite changed by the yellow cast of the gold thread or by the yellow thread used to sew down the gold metallic thread.
I have to speak here about a recent objection to seams. For more than a hundred years the 27-inch English damask have been used for Altar hangings, frontals and super-frontals, piecing the widths together, matching perfectly the pattern and design of the damask, pressing the seams flat and leaving them so. But of late an almost fanatical revolt against these seams has developed; and an extraordinarily ugly; and assinine fashion of covering these seams with a narrow braid has come to the front. This should not be done. Few Altars are more than 100 inches long. The 50 inch damasks can be pieced in the centre, and the seam almost entirely covered with a cross or IHS. Or one entire width may be used for the centre, and another width may be cut in half and pieced on to the two ends. See Fig. 29 for a superfrontal, and Fig. 28 for a frontal. There may be five or even seven such orphreys on a superfrontal, and no embroidery if desired.

A red superfrontal (illustrating Angel orphreys) is here given which I made for St. Margaret Church, Washington, D. C. The damask is the precious Salisbury pattern, of which there is no more. The label is made in Italian stitch using six shades of gold colour floss caught down with waving lines of finest 8K gold thread in the same way it is done in the gold veil, Fig. 35. The Alleluias are in old red floss in long and short stitch. The grapes and leaves are in green shades. An enlarged photograph gives a clearer view of the embroidery. The orphreys are made of red velvet, and the six winged cherubim are embroidered on a separate frame and transferred to the velvet. The wings are embroidered in six shades of flame colours, with a lavish use of gold thread. The faces are entirely embroidered by hand, the hair being a lovely light brown, and with blue eyes.

It gives me joy to put here before you a new photograph of the High Altar of Washington Cathedral vested in the Advent frontal, which we use also for Lent. The frontal is made of a rich blue damask silk the shade of the flag blue. The orphreys (or panels, if you prefer), are made of black and gold St. Hubert cloth of gold (than which there is none better), in the pomegranate pattern. I did greatly desire to have five orphreys; as the symbolism of the number five is sacrificial; but the width of the damask, and the limited amount available, would not allow it; so reluctantly I have to add the sixth orphrey.

There is no embroidery whatever on this frontal; its regal beauty being due to the gloriously beautiful material of which it is composed. The fringe on the bottom is blue silk to match the damask, and in the heading of the fringe is woven pure gold thread. The galloon that covers the edges of the cloth of gold orphreys is a one inch dull gilt.

This picture was taken the day of the funeral of Miss Mabel Boardman, (for so many years Head of the American Red Cross) which is the reason for lilies being on the Altar in a Penitential season of the Church Year. See Fig. 31.